

REMARKS

Claims 1-53 remain in this application. Claims 1, 5-9, 19-36, 52, and 53 have been amended. Claims 13-18 and 37-51 have been withdrawn.

In view of the examiner's restriction requirement, the applicants retain the right to present claims 13-18 and 37-51 and the embodiment of figures 4-5 in a divisional application.

I. ELECTION/RESTRICTIONS

The examiner stated that new claims 52 and 53 do not link invention Groups I and II because they do not provide the "remote control" language found in the process and apparatus claims of Groups I and II.

The applicants amend claims 52 and 53 to include the "remote control" language the examiner points out. The applicants submit that claims 52 and 53 are now proper linking claims that include "means" for practicing the processes claimed in claims 13 and 37. Therefore, the applicants respectfully request that the examiner remove the restriction requirement with respect to Groups I and II. The applicants appreciate that, in addition to "remote control" language, the claims have also been amended to include wireless remote control language. Although the withdrawn claims contain no such language, the applicants would be willing to amend the withdrawn claims to bring them in line with the current amendments.

II. INFORMATION DISCLOSURE STATEMENT

The examiner objected to the information disclosure statement because filed May 21, 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the reference cited, US Patent No. 6,175,889 is a patent to Olarig instead of the intended Naville reference of the IDS.

The applicants resubmit the information disclosure statement with the correct reference to the Naville patent as US Patent No. 6,175,809.

III. CLAIM OBJECTIONS

The examiner objected to claim 29 because claim 29 reads, "charged by compressor" when it should read "charged by a compressor."

The applicants amend claim 29 above. Therefore, the applicants respectfully request that the examiner remove the objection to claim 29.

IV. CLAIM REJECTIONS – 35 USC § 102

A. Examiner's Statements

The examiner rejected claims 1, 4-5, 8-12, 19, 25, 28-29, and 32-36 under 35 U.S.C. § 102(c) as being anticipated by Tulett (U.S. Patent Application Publication No. 2004/0228214 A1).

B. Law

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.¹ The identical invention must be shown in as complete detail as is contained in the ... claim.² To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."³ Thus, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish inherency of that result or characteristic.⁴ In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.⁵ In addition to disclosing every claim limitation, an anticipatory prior art reference must enable the practice of the invention and describe it sufficiently to have placed it in the possession of a person of ordinary skill in the field of the invention.⁶

C. Claims 1, 4-5, 8-12, 19, 25, 28-29, and 32-36

Claims 1, 4-5, 8-12, 19, 25, 28-29, and 32-36 of the present application claim a seismic source system comprising a buoy and a wireless remote control system. The buoy comprises an operating system, a seismic wave production device operated by the operating system, a placement system, a wireless buoy communications system, and a dynamic position locating system generating a position signal indicating the location of the buoy. The wireless remote control system is in wireless remote

¹ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

² *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

³ *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999).

⁴ *In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993).

⁵ *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

⁶ *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

communication with the buoy through the wireless buoy communications system. Tulett, however, teaches physical communication lines (112) for communication with the gun controller (118) and computer processor (120) on the rig (100). Thus, Tulett never discloses wireless communication as required by claims 1, 4-5, 8-12, 19, 25, 28-29, and 32-36. The applicants therefore respectfully submit that the rejection is unsupported by the art and request that the examiner withdraw the rejection.

V. CLAIM REJECTIONS - 35 U.S.C. § 103

A. Examiner's Statements

The examiner rejected claims 2-3 and 26-27 under 35 U.S.C. § 103(a) as being unpatentable over Tulett and further in view of Haukjem et al. (U.S. Patent No. 4,660,184). The examiner rejected claims 6-7 and 30-31 under 35 U.S.C. § 103(a) as being unpatentable over Tulett and further in view of Detrick et al. The examiner rejected claims 20, 21, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Tulett and further in view of Robbins (U.S. Patent No. 6,131,694). The examiner rejected claim 22 under 35 U.S.C. § 103(a) as being unpatentable over Tulett and further in view of Bailey (U.S. Patent No. 5,917,160). The examiner rejected claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Tulett and further in view of Norris et al. (U.S. Patent Application Publication No. 2002/0092701).

B. Law

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.⁷ If the examiner does not produce a *prima facie* case, the applicants are under no obligation to submit evidence of nonobviousness.

To establish a *prima facie* case of obviousness, the following tenets of patent law must be adhered to: (a) the claimed invention must be considered as a whole; (b) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (c) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (d) reasonable expectation of success is the standard with which obviousness is determined.⁸ Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure.⁹

⁷ *In re Roufflet*, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998).

⁸ *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5 (Fed. Cir. 1986).

⁹ *In re Vaech*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.¹⁰ Thus, a statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references.¹¹ Additionally, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.¹²

Also, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.¹³ In addition, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.¹⁴

C. Claims 2-3 and 26-27

Claims 2-3 and 26-27 depend from independent claims 1 and 19. The applicants repeat the remarks made above with respect to claims 1 and 19. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.¹⁵ Therefore, the applicants respectfully request that the examiner remove the rejection with respect to dependent claims 2-3 and 26-27 as well.

D. Claims 6-7 and 30-31

Claims 6-7 and 30-31 depend from independent claims 1 and 19. The applicants repeat the remarks made above with respect to claims 1 and 19. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.¹⁶ Therefore, the applicants

¹⁰ *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); see also *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).

¹¹ *Ex parte Levensgood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); see also *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999).

¹² *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

¹³ *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

¹⁴ *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959).

¹⁵ *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

¹⁶ *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).